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ABSTRACT

Planning and management is now and will continue to be a way of life for the academy. The shape of education in the years to come will be determined by the ability to accommodate management systems and mold them to a desired form. As the academic profession embraces planning systems and learns to live with a dismal financial future, leadership skill in defining this difference will be crucial. Academic planning seems to have had some beneficial impact; more institutions are being described as "managed" in the sense of adopting an overall strategy to confront the new depression. Despite present problems, the possibilities of effective, thorough planning procedures provide the most rational direction for the future of higher education. (Author/KE)

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ACADEMIC PLANNING: PROBLEMS AND POSSIBILITIES

U.S. DEPARTMENT OF HEALTH,
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"Only one thing can be predicted with certainty: whether the depression stops or not, we are going to have a different kind of higher education in this country."

Robert M. Hutchins, in
"Hard Times and the Higher Learning"

Hard Times

In the parlance of the dismal science of economics, the economy is variously described as being in a temporal state of "depression" or "inflation" and even "stagflation." No corresponding degree of uncertainty permeates discussion of the economic health of higher education. A grim future is all but certain. The survival of most colleges and universities is anything but assured, particularly if the institutions are to continue in a recognizable form.

The growth decades in the immediate past reflected a "more is better" syndrome which, as described by Cheit, made education more vulnerable to the problems ahead.[1] That fraction of higher education income based on foundation soft money increased 500% from 1955 to 1965. Developmental giving more than doubled during this same period. The principle of equal access to education contributed to an increase in the percentage of eligible college aged youth enrolled from a level of 14% in 1950, to 32% in 1970. The total student population increased from 3.6 million in 1960, to 7.9 million in 1970. Ph. D. graduates became a glut on the market. In the post-Sputnik decade, legislatures generously funded this enrollment growth with a minimum of concomitant accountability. State support increased from $1313 million in 1960 to $5850 million in 1970.

During this era, income available to higher education increased almost

exponentially, although for most institutions, good fiscal health was more artificial than real. Costs more than kept pace with increased revenues. As stated by Clark Kerr,

> "There is some tendency for costs of goods and services purchased by institutions of higher education to rise somewhat more rapidly than the average annual increase of about 2.2% in the consumer price index."[2]

The inflationary spiral has exacerbated the above trend and when combined with the more recent energy crisis, extraordinary pressures have been placed on the fixed cost portions of a college's budget. Utility costs are soaring. Faculty and staff salaries are actually losing ground to inflation. Student aid costs have continued to grow.

As a bulge in the college age (18-24 years) population passes, the traditional market for higher education may decline. Foundation and governmental support have fallen off. The cost-income squeeze has pressured tuition increases to a point of potential saturation. Students at private institutions suffered an average annual increase in fees of 7.5% from 1958 to 1968, while students at public institutions fared only slightly better. According to a recent estimate, a family with children aged 6, 8, and 10 will have to save an average of $7,031 per year to send these children to private colleges and correspondingly, $4,179 per year for entrance to public institutions.[3] If the consumer is forced to bear an increasing share of the cost of higher education, a point will be reached where competing demands for the consumer's purse will edge tuition from the marketplace. Enrollments will decline. Many private colleges will fold-up, and egalitarian access to higher education will diminish. As one college president has suggested,

> ". . . we would have to either abandon the quality of what we're doing, abandon great discernible areas of activity or abandon the effort to be accessible on the merits of talent, not of wealth or race or of inheritance."[4]

The problems of educating minority groups and the economically disadvantaged may become acute. Aspirations of affirmative action hiring programs will suffer as retrenchment prevents the redress of past inequities and cancels the small gains previously made.

The atmosphere of continued growth was a heady, invigorating elixir. The psychological relaxation of good times made for a vulnerability in hard times. As the dollar flow increased unabated, academic planning almost seemed superfluous. When the gloom of zero growth and retrenchment required hard choices, the necessary remedies seemed enervating. If recent growth has increased higher education's susceptibility to downward change, what does the future portend? President Fleming of the University of Michigan speculates:

> "In short, the financial prospects of universities in the foreseeable future are dim. Costs will continue to rise, while income is likely to fall short of keeping pace. Pressure for wage and salary increases for both academic and non-academic employees will exceed the institution's capacity to respond, thereby resulting in some cutbacks in personnel (probably through attrition) so that the available resources can be spread over fewer people. This will further aggravate the market for new Ph. D.'s but is probably unavoidable. Tuition will inevitably rise as the cost of living continues to go up, but resistance will grow and, with enrollments falling, institutions will be less willing to let tuition rise. Endowment income is at best uncertain in a world which seems to be in the throes of a major international financial realignment and in which the American position is less strong than it once was."[5]

That fraction of the nation's GNP going to higher education has rapidly risen from about 1% in 1960 to present levels threatening 3%. Clearly, such a rate of increase for any sustained period of time is impossible. At best, a plateau in this growth

curve may be hoped for although realistically, a downturn is expected. In 1970, a study identified two-thirds to three-fourths of public and private institutions as "either in financial difficulty or headed for financial difficulty."[6] A more recent examination notes the heroic efforts to cut costs and characterizes higher education as in a state of "fragile stability."[7] This stability may be simply a moment to catch a breath, the prelude to a mortgaged future which must be systematically anticipated.

The Steady State: An Illusion?

Computer simulation experts have predicted that our society's reckless use of resources coupled with inordinate population growth will contribute to a general degradation of the quality of life as we know it. A suggested cure is a move towards zero growth, rapid equilibration to a steady state. A parallel to higher education presents itself. The system has spawned programs and colleges which have multiplied and prospered. Staggering quantities of resources have been consumed, perhaps recklessly. Powerful external forces are shaping the manner by which higher education seeks its own level of economic stability.

While many academicians have bemoaned the loss of the years of sustained growth in higher education, they seemingly have taken comfort in describing the future as a zero growth condition approximating a steady state. A steady state implies long term stability, a guaranteed minimal level of support which imaginative administrators might use as a springboard to refocus the mission of the university. Moreover, "steady state would be a welcome relief from spiraling inflation, dropping enrollments, and lay-offs of faculty and staff."[8] The Carnegie Commission sounds a further optimistic note implying that "stagnation. . . is not likely. . ." and "continuation

of all the current crises is not inescapable."[9]

An authentic economic steady state would be reassuring to many in the education profession. The implication is an equilibrium condition in which income is balanced with costs, new enrollees replace graduates, new buildings spring up as old ones are bulldozed away, and new curricula are created as old programs fade into obsolescence. Although in aggregate, the condition would seem to be forthcoming, the "assumption of equilibrium is invalid for most institutions."[10] While in a macro-economic sense, steady state is a realistic aspiration for higher education, within institutions, it is neither probable nor desirable. The diversity and complexity of academia introduce an almost infinite number of variables to the steady state equation. The ferment and change associated with academic life are somewhat in opposition to long term, institutional stability. The idiosyncratic characteristics and the distinct environments which mark our institutions will provide insulation from a steady state in all but the most confining state public systems. Stationary states may be controversial as Boulding warns:

> ". . . stationary states are frequently. . . societies in which government is primarily an institution for redistributing income towards the powerful and away from the weak."[11]

Whether this has been the case in restrictive state systems is subject to some speculation.

The fragile stability which Cheit identifies in his restudy of the new depression in higher education is an artifact. The present stability is a product of unusual "one-time only" cuts and an optimistic view of the cost income future. Deferred expenditures, salary pressures, rampaging inflation all suggest that the financial crisis is still very much with us. "To live with inflation is never to catch up" aptly describes

our predicament, and

> "...despite repeated reassurances to the contrary, higher rates will surely continue and the university's costs will escalate, along with other costs. We in higher education need to adjust our thinking to this source of instability, and this need suggests a certain danger in dwelling long on the steady state condition. Steady state implies stability, which is not possible in an inflationary period."[12]

The inflationary treadmill forces the university to run faster, never catching up and usually losing ground. The well known principle of LeChatelier states that under stress, a system at equilibrium will act so as to relieve that stress. The inability of higher education to come to equilibrium, to squirm away from the grip of inflation, aptly demonstrates the limitation of the steady state analogy.

It is apparent that for many institutions, attainment of some minimal level of stability in the foreseeable future is only illusory. Unless massive federal and state aid to colleges and universities is made available, one can expect to see a non-equilibrium exchange of high cost liberal arts colleges for low cost two-year colleges. Those institutions which survive must husband their resources and optimize their utilization for maximum effectiveness. A real danger may be a diminution in educational quality as a price of survival. More credits for fewer hours, larger classes, and increases in the student-faculty ratio are survival techniques which Walter Metzger describes as putting "less chocolate in the same price bar."[13] All instincts toward continued existence require a thoughtful, rational and systematic approach to planning for the future. Howard Bowen has noted that, in the past, colleges have led a hand-to-mouth existence in that they have maximized their funds each year and then spent what they had gathered.[14] It seems logical that the general public would not find this "bottomless pit" method of financing higher education acceptable

and that those who are involved in the business of education should be able to describe the needs and outcomes of higher education in a more precise manner. Careful management of future resources is the priority issue for academic leadership.

Academic Planning and Management

To use available resources more effectively, the Carnegie Commission suggests cuts in the expenditures of higher education of approximately 20% by 1980 and a continuing growth rate of 2.5% above the cost of inflation. The increased effectiveness derives from fulfilling other societal needs for which resources are required, and from the increased vitality which cost cutting will induce into academic institutions. The Commission also states that a shortening of the time required for a college education is possible without dilution in quality.[15] In addition, it is assumed that colleges do not wish to remain static, and it is suggested that as a stimulus to change, each institution annually should loosen up 1% - 3% of old funds for purposes of reallocation. If resources are scarce today and may be dwindling in the future, those persons bearing the responsibility for managing the institutions must be blessed with the wisdom of Solomon if their colleges are to survive to the 1980's and retain the quality of the past. A change in style of leadership and management appears to be warranted;

> ". . .to make them [cuts] in the interests of new programs requires commitment to a plan, criteria for performance and output, and administrative authority beyond what is found on campuses headed for financial trouble. . ."[16]

Past management practices have been described as "folk methods of administration" which incorporated ad hoc, piece-meal decision making.[17] In a relatively stable, flush era, this form of management methodology worked. Faculty understood

it and related to it. Exponential growth covered up mistakes which occurred from time to time. As the boom flourished, the numbers, size and complexity of universities and state systems increased. While pluralism and diversity were welcomed, only with adversity came the recognition of a need for coordination and resource husbandry. As the new depression settled upon higher education, good planning and management practices became essential.

Silber notes that the four-year interval (1965–1969), between a period of broadly based consensus of support for education and the time when the campus became a public whipping boy, may be directly related to the issue of free speech. His notion is that administrators ". . . failed in the period from 1965 to 1968 to make clear the special character of the university as a free market place of ideas and the conditions on which the freedom of that market place depends."[18] It is immaterial whether he is correct in his assessment of the magnitude of importance of any "well poisoning" of which colleges might be guilty. What is important, is that any diminishment in the credibility of higher education would have a synergistic effect on funding decisions in unfavorable financial times. Student uprisings may have sensitized the taxpayers towards the academy feeding at the public trough. Moreover, fierce competition between public agencies for available dollars may have aggravated an already threatened university budget. In Michigan, the fish ladder at Grand Rapids may compete against the increased fuel bill in Ann Arbor. The football scholarships at Western Michigan University may be in conflict with the welfare checks in Flint.

Increased costs, size complexity, competition and changing public attitudes towards education, together suggest a demand for more institutional accountability to the public. The legislators want to know not just for what the university wants funds,

for but in addition, they want to monitor where previously allocated funds were spent. How do expenditures between institutions compare, by program, by student, by credit hour, by square foot? These unit cost measures serve to stimulate, provoke, and even harass university decisions and practices. A leveling of program may result. Regardless, "folk method" explanations are no longer responsive to legislative inquiry. The environment outside the university is one now described as relentless accountability. There may be a certain fraudulence inherent in the above forms of accountability. It is questionable whether such a control system produces individual results congruent with overall desires.

All of the foregoing compel a necessary response from higher education. Systematic, long-range, educational planning is required to sort out, from all the pressing claims, the most urgent priorities for funding in shaping future directions of an institution. Planning implies an ability to predetermine future courses of action. It also suggests an ongoing continuous process which has the capacity to cope with change and be subject to review and evaluation.

Has higher education awakened to the call for thoughtful planning? Lawrence Bogard notes that only 2.8% of 1,873 responding institutions have implemented his minimum level of management organization, which is:

"1) Conduct of a critical and continuous self-examination of curriculum and administration and operational procedures; examination of the relevance of established goals and objectives; evaluation of selection and processing procedures; understanding of the participants in the educational process and a continuous examination of the environment in which the institution operates.

2) Establishment of relevant goals and objectives; justification for and allocation of resources commensurate with current and future demands for these resources and objectives; continuous accountability for the expenditure of resources; maintenance of flexibility in goal-oriented operations.

3) Development of timely and valid information in order to achieve the above and to ensure the validity of decisions."[19]

He goes on to identify each of the above as respectively the functions of an Office of Institutional Research, a Planning-Programming-Budgeting System, and a Management Information System. Earl Cheit similarly describes the above under the rubric of management systems and has estimated that more than one-half of all institutions now use some form of planning system.[20] A variety of organizations have sprung up around the country to encourage the movement towards management systems. The leading organization of this type, the National Center for Higher Education Management Systems (NCHEMS), estimates that up to 37% of 1,271 institutions surveyed, use at least one of the "management tools" which have been developed.[21]

The utilization of academic planning and all of the accoutrements of information systems and other management tools have become increasingly ubiquitous. As previously mentioned, state systems have embraced these management systems. The Commissioners of the Western Interstate Commission on Higher Education (WICHE) identified as their top priority, "to provide more and more accurate, information about post secondary education to legislators and the general public."[22]

It seems only a matter of time before the United States Congress enters into the picture and "provide(s) continuing leadership in encouraging and developing national standard procedures, appropriate to each type of institution, for calculating the direct, indirect, and full annual cost of instruction per student by level and field of study."[23]

There is an inference from the above that public institutions will increasingly find themselves held accountable to state and national authorities. Private institutions of all descriptions are not immune. Financial distress seems to be mostly acutely

localized in the private sector and as a relief, state aid with its accompanying degrees of accountability seems to be avidly sought. Even schools with little or no external governmental pressures are faced with financial difficulties which are very pressing and not readily amenable to stabilization. All those in higher education are under the onus of accountability, especially to themselves. As a critic laments.

> "Accountability...may be a crooked game, but right now it is the only game in town, so we've either got to be prepared to play it, get another game started, or close it down."[24]

Careful planning seems to be the only rational response to an enhanced public interest in accountability. The antithesis implies circumstances which would be irrational in whatever environment higher education might find itself.

Definitions

The previously described problems of economics and accountability establish a need for academic institutions to approach the future in a planned systematic way. The focus here is to observe the impacts such planning systems are making on the tradition university mode of operation. There are as many definitions of the processes of planning, budgeting, managing, programming and allocating as there are systems. The management organization of Lawrence Bogard has been detailed earlier. The National Association of College and University Business Officers (NACUBO) include in their proposed planning and budgeting process the following:

> "On an annual basis:
> Review of mission, goals and objectives
> Review of external and internal environmental assumptions
> Review of institutional policies
> Review of program plans
> Consideration of alternative academic and support plans
> Analysis of the total program plan and budget
> Published plan and budget
> Evaluation of the process

On a five-year basis:
Academic program plan
Budget for operations
Capital expenditure budget
Cash flow projection"[25]

Earl Cheit describes his management systems to include:

"1) the full kit of analytical tools available for use in institutions
2) the related but more comprehensive techniques designed for statewide and even national use
3) the conception of organization not as structure but as process: a process of goal designations, formulation of alternative plans, identification and selection of the best choice evaluation of results and continuation of the cycle."[26]

Although a purist would certainly quarrel, in this paper the broadest possible connotations will be ascribed to planning. Included in the term academic planning, are all of those elements of information gathering, budgeting, and allocating which Earl Cheit might describe as management systems with emphasis upon the academic operation of the university.

How have these planning systems made an impact upon the academy? Are there problems? What are the limitations to efficient management of higher education? What are the possibilities for the improvement of planning? Although planning as an intensive enterprise is somewhat new, there is some experience one can examine.

Are There Limits to Efficiency?

"By at least 1984, if we work hard we can make education supremely efficient and accountable. . . But. . . there are limits to efficiency, limits to slide-rule definitions of educational productivity."[27]

If the logic of the managerial revolution is inevitable, has it received an unanimity of support from higher education? Has the movement represented a panacea for nagging financial ills? Has the utilization of academic planning and the

accompanying managerial tools led to better decisions? Has there been broad acceptance by the campus community as well as the general public? The answers are all somewhat ambiguous. A swelling dissatisfaction with the movement is abroad in the land, occasionally bursting forth but always festering beneath the surface. The origin of this discontent is primarily from those same hills that the financial bear is hungerily stalking.[28] Academicians probably have never been convinced of the stark realities or of needed improvements in efficiency or effectiveness. Faculty may still be relatively insensitive to the limited size of the public coffer and may be even unconvinced of the need to be accountable, but the economic hard times are all too apparent. Tenure quotas, college closings, collective bargaining, and the staggering numbers of applicants for each open faculty slot are tips of the iceberg of evidence which compel even faculty to accept a more systematic managerial style. With the inevitability of planning, there seems to be a general reassessment of the limits to management practices. Much of the debate is ingrained with a realistic portrayal of the state of higher education - a very healthy sign.

Most criticism of management practices in academia, centers around the imperfect superimposition of profit oriented, mechanical, industrial practices upon the humane, esthetic, amorphous world of higher education. One observer likens the university's image to that of a "regulated public utility" where faculty are "worker-bees producing quietly, unobtrusively on schedule, their fair share of production." He suggests that education is "more like the Metropolitan Opera than Metropolitan Life Insurance, more like church than a factory and more like a research laboratory than a highway department"[29] The Carnegie Commission,

quoting Barmol and Bowen, notes that higher education is a performing art which is immutable to productivity changes due to improved technology. Although a production line may be speeded up, the number of minutes in a live performance of a Schubert quartet may never be below three hours. Further, the greater the technological advance in society as a whole, the greater will be the production pressures on any activity where productivity is stationary.[30]

Critics suggest that the Commission itself may be a causal agent in propagating industrial analogs. The recent Commission reports "compare our output to snowmobiles or breakfast cereals, but does not compare educational expenditures to other federal investments."[31] Moreover, higher education is said to be following in the tracks of the railroad industry, a "spent force" competing with airplanes and automobiles. "Educating men and women to the highest level of their ability is comparable to carrying pigs to market,. . .students are automobiles, and campuses, assembly lines."

While true, the laments of the industrial analog critics wear thin. Usually, such diatribes end on a frustrating rhetorical note, an authentic questioning of what should not be but with little guidance as to what should be. It would appear that such critics need to instill more pragmatism into their views. It may be that higher education is not a commercial industry, but the differences need to be convincingly articulated to those in as well as out of the profession.

A most thoughtful and comprehensive analysis of "management systems" has been provided by Earl Cheit.[32] He has identified a number of intended and unintended consequences of the employment of these systems in a question and answer form which is summarized as follows:

"1. Has the work on management systems produced better management and planning on campus?"

Cheit tentatively says yes. Awareness of planning leads to increased effectiveness.

"2. Will the use of management systems help develop more favorable attitudes toward higher education?"

Cheit suggests that the answer is no, based on the facts that the most successful public agencies use other techniques coupled with a position that public attitudes are not based on efficiency. (He is probably half correct. The public will react negatively if an institution is inefficient although more favorable attitudes are more difficult to evaluate.)

"3. Will management systems accelerate the trend towards centralization of higher education?"

He describes centralization as an inexorable force accompanying the management movement.

"4. Will the use of management systems reduce diversity in higher education?"

Cheit is hesitant to say yes but acknowledges the enormous pressures, particularly in state systems, which may homogenize higher education.

"5. Do systems requirements themselves tend to influence decisions about education?"

Yes, the tail does appear to wag the dog. Decision-makers appear to feel more secure when their decisions are based upon quantitative rather than qualitative information. An attitude prevails that only the measurable things really matter while everything else defies measurement. Priorities are influenced accordingly. Although all people seem to agree that planning is a continuous process, critics suggest that at best it

never catches up to itself. Aaron Wildavsky notes "Despite the absence of evidence on behalf of its positive accomplishments, planning has retained its status as a universal nostrum." and "planning is defended not in terms of results but as a valuable process."[33]

Others have added to Cheit's list of management systems outcomes. Edward Jennings has suggested that we should be wary of investing too much and expecting too much from the planning process.[34] Francis Finn has quoted Howard Bowen as having pointed out that the systems may be more costly than most advocates realize.[35] An ironic outcome of management systems may be a decrease in internal accountability. President Harold Enarson has written that "the impact of multiple sources of regulation on the university is to discourage flexibility, ultimately destroy true accountability," an opinion which tends to suggest that systems do influence educational decisions, a la Cheit.[36] In the same vein, a general skepticism of management and planning seems to focus on the self-fulfilling prophetical character of the process. It is the nature of the planning beast to reach for more.

Clearly academic planning practices are useful, but it is also realistic to assume that there are finite limitations to their application on the recalcitrant industry of higher education. What are these limits and how might they be defined and understood? It is difficult to evaluate. Just as we pride outselves in a diversity in educational opportunity, the educational system has spawned a pluralistic bounty of planning and management systems. Systems are like data, and the problems stemming from the use of both are not easily translatable from one institution to another. Perhaps this is why critics of management systems tend to focus on "quantitative rather than qualitative information."

Nonetheless, a number of institutions now have had rather extensive experiences with various planning techniques and management systems. Close examination of planning at one institution may provide a more clear idea of the problems and possibilities faced in the planning process. Central Michigan University has employed a detailed academic planning model for the last five years. A description of this planning system followed by an analysis of some of its impacts is useful in the evaluation of planning. The following description of a specific process might aid in assessing the present period of review in the managerial movement.

The Planning Process at Central Michigan University

Central Michigan University is a comprehensive state supported university founded in 1897 and located in the geographical heart of the state's lower peninsula in the city of Mt. Pleasant, Michigan. Central enrolls approximately 14,000 students in five colleges (Arts and Sciences, Education, Fine and Applied Arts, Business Administration, Health and Physical Education and Recreation), a Graduate School, an Off Campus Division, and a unit for non-traditional students in its Institute for Personal and Career Development.

The institution grew very rapidly during the 1960's, starting from 5,285 in 1961-62 and increasing to 14,996 in 1971-72. The enrollment has tapered off during the last several years but has somewhat stabilized at 14,500 and appears to be constant for the immediate years ahead. Approximately 14% of the student body is enrolled in graduate curricula which include 10 masters and specialists degree programs and one doctoral degree program.

The faculty are organized under the Michigan Employment Relations Act and

are affiliated with the Michigan Education Association (MEA-NEA). The majority of the faculty are located in the School of Arts and Sciences with the rest distributed among the other schools and divisions. In addition to the bargaining unit, an administration-faculty-student Academic Senate acts on predominately academic matters and many issues of governance. The deans and directors, the Vice Provost for Instruction and Research, the Vice-President for Administration and the Provost's Office constitute the Council of Deans which is chaired by the Provost. The Council recommends policy decisions regarding academic matters and also makes recommendations to the Provost on personnel and planning decisions. The Provost reports to the President who is responsible to an eight member Board of Trustees, all appointed by the Governor of Michigan.

The financial fortunes of the institution have fluctuated with that of a state economy dependent on the automobile industry, but the allocated $/FYES have always been at or near the bottom of all state institutions. By interinstitutional standards, Central has been very efficient!

The Process --

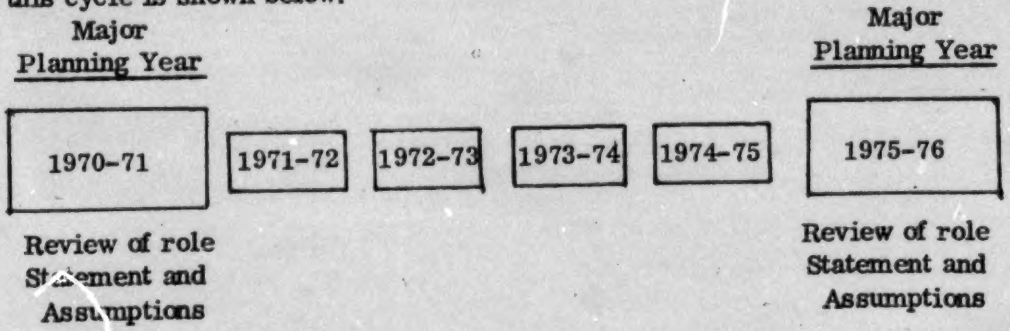
The planning system at CMU is described in a series of documents far too comprehensive to repeat here. The most important are: Planning for the Future, a document describing the annual consequences of planning and budget allocations resulting therefrom; Guide to Academic Planning, a guide issued to planning units on an annual basis; and The Planning and Allocation System: A Description of the Planning Process at Central Michigan University, a paper written by the Provost, Charles J. Ping. The following statements represent a series of abstracts and summaries of these documents as well as the comprehensive planning system.

Goals and Assumptions --

Central Michigan University serves four primary goals: 1) liberal education, 2) teacher preparation, 3) career and vocational education, and 4) graduate education. In addition to the missions of the university, a set of planning assumptions was developed which attempted to describe different variables over a five year period. These assumptions were:

1) trends and directions in higher education
2) student population
3) faculty needs
4) vocational and professional needs and opportunities
5) financial resources

The present role statement of the university and the assumptions for the future were developed during the 1970-71 academic year in collaboration with the Planning Review Committee, a body composed of faculty, students, administrators and other members of the academic community. At the end of a five year period, the goals and assumptions will be re-examined in preparation for the next five year cycle. This cyclic pattern of planning provides a period of self-renewal and re-direction for the university's goals. "Role and assumptions are intended to direct decision-making. Otherwise, planning is little more than a series of isolated decisions."[38] A representation of this cycle is shown below:



Information Systems --

As previously described, management information systems are an integral part of any systematic planning enterprise. The extent to which they are utilized depend on available computer technology, personnel resources, and the presence of a supervising state system. Central Michigan University has a Director of Institutional Research and has developed various information systems analogous to some of those commonly associated with NCHEMS. A student flow model indicates student population expected at the university during the foreseeable future. An induced course load matrix based on departmental majors is utilized to project enrollment in departmental units. These projections are extrapolated to the end of a five year planning cycle. Departments are asked to review these enrollment figures and identify factors which might well alter the projections. Faculty positions, for estimation purposes, are determined by a "maximum student/faculty ratio consistent with the structure of the discipline and the pedagogy effective in particular instructional programs."[39] Those ratios are a target for each discipline at the end of the five year cycle. The intervening years will show a trend of staffing towards the objective in the fifth year.

All of these calculations yield tentative planning figures to be used as an information base within an institution-wide ratio of 21:1 funded by the legislature. Eventual allocations are determined by the planning process. Ultimately, actual planning figures reflect further analysis by each dean of essential program needs and the status of faculty appointments in departments (tenured, temporary, etc.). All information on enrollments and faculty positions is distributed in the fall semester so that departmental and school units may use these data in their planning documents.

Preparation and Review of Plans --

As previously described for the university, statements concerning goals and assumptions are also developed for departments and schools at five-year intervals. Consistent with these general objectives, annual planning documents are requested in the fall semester. Each department describes its needs and plans for the coming year. Typically, such plans might describe proposed curricular directions such as degree programs, new majors and minors, other new program options, or more commonly, the plans would request additional resources such as staff, supplies, equipment, and space.

Departmental plans are forwarded to the respective schools where they are subject to review, critique and ultimate reordering into a school document with the emphasis on programs which are in congruence with the school's perception of its role as well as that of the university. Planning decisions do not begin from a zero base budget. Essential support for the maintenance of existing programs is the base for planning. As enrollments have shifted from one department to another, there has been intense pressure on departments to maintain existing programs in the face of dwindling staff.

Review of planning documents for all academic programs is the task of the Council of Deans. Various non-departmental units such as Library, Off Campus and the Institute for Personal and Career Development, also have their planning documents reviewed by the Council. Recommendations which are tied to curricular actions are subject to the normal curricular review by established processes. Curriculum committees, the Academic Senate and the Board of Trustees all participate in this review, with major programs and degrees receiving the most intensive

scrutiny. The State Board of Education also examines these program changes. One of the bases for the five-year cyclic nature of Central's planning process is so that it might coincide with the State Board's insistence on a five-year projection and justification of new degree and option programs.

Allocation of Resources --

Priorities established by the schools in their planning documents are considered together by the Council of Deans to provide a basis for university-wide priorities and subsequent allocations. Allocations are made in the specific areas of:

1) faculty positions
2) support staff
3) equipment
4) supplies
5) space and remodeling
6) program change

Should new construction or major renovation be recommended as a consequence of planning, a specific proposal is prepared by an ad hoc committee and reviewed by the State Capital Outlay Committee.

All of the foregoing has focused upon planning and allocation in the academic sector of Central Michigan University. These decisions cannot be made in isolation from the total operating needs of the university. The Office of the President has the responsibility for the total operating budget of the university. Together with the Vice Presidents, he makes the basic budget divisions subsequent to the enactment of the state appropriations bill.

Reporting of Decisions --

A preliminary report of the planning process, issued early in the spring,

identifies the priorities and initial allocations to units in faculty, equipment and supplies. Once the state legislature has completed the budgetary process, final allocations are made to all units of the university. Unit cost analyses are utilized to monitor and provide a basis for decision-making and the budgets are adjusted to cover travel, office supplies and other expenditures which are increased due to new faculty positions. Special inflationary factors are also built into budgets to take into account especially susceptible expenses such as laboratory supplies.

A comprehensive report, Planning For The Future, is also distributed to the university community at the beginning of each academic year. This report summarizes all approved allocations and plans for the future year as well as the next five-year period. Some proposals are approved not for implementation, but for continued evaluation. Other proposals which have emerged from department and school documents are not accepted, and those units are so informed. Another cycle of this continuous planning process thus begins anew as shown in the annual calendar below.

July	Aug.-Sept.	Sept.-Oct.	Nov.-Dec.
Provisional projections of enrollment	1. Planning For The Future report 2. Allocation budget 3. Enrollment projections 4. Faculty projections 5. Request budget	Preparation of department and other planning documents	School review of planning documents

Jan.-Feb.	March	April-May
University review of planning documents	Preliminary Planning Report Program change Faculty allocations Equipment allocations Adjustments to supplies budget Space and remodeling studies	1. Implementation plans 2. Curricular review 3. Faculty recruitment 4. Equipment orders

Planning at Central Michigan University - Review and Retrospect

This planning process essentially as described, has served CMU since 1970-71. During the intervening years, as the community became more acclimated to the process of planning, some adjustments and refinements developed, but its basic design has remained intact. Because of the five-year periodicity built into the process, the report of the fourth year contained in Planning For The Future, 1974-1979 suggested that particular emphasis be placed on a review of planning at Central Michigan University, and stated,

> "The next academic year (1974-75) marks the end of the first full five-year effort to develop a planning and allocation system for the university. In preparation for the next five-year cycle (1975-76 through 1980-81), the planning process was studied and critiqued by a seminar convened at the end of the 1974 summer session. The seminar examined some of the current literature dealing with university planning and reviewed alternate models for planning. Issues of the current systems which were considered included processes for periodic review of the role statement and assumptions for the future, procedures and data for the development of enrollment projections and student/faculty ratios, and the review processes at school and university levels."[40]

Summer Seminar

The Seminar On Planning consisted of fourteen faculty representing different departments and all schools of the university. The Provost, Vice Provost for Instruction and Research and the Director of Institutional Research also participated. The seminar met as a group during the summer prior to the 1974-75 academic year. Based on previous critiques of planning as well as comments generated during the discussions, the seminar focused upon the following areas:

A. Goals of the university and assumptions related to planning
B. Enrollment predictions
C. Student/faculty ratios

D. Nature of planning documents
E. The review process
F. Communication and understanding

Substantive recommendations were made to the university community. Some of these were implemented immediately, others remain for the future. In addition to specific recommendations, the seminar served to raise to a visible level a large number of faculty concerns about planning which sensitized those members of administration and faculty who work with the planning process. In some instances faculty concerns contrasted with those raised in the literature, while others repeated themes common to critics of planning and management. Some of the concerns are worth noting, and are mentioned below.

Is planning worthwhile? While "the planning process was [thought to be] a valuable" exercise, "there were a number of concerns voiced about its implementation."[41] The faculty do not seem to warmly embrace this management activity, yet neither do they give the impression of resignation towards planning. Their acceptance of the dismal financial state of higher education is real, and while they are not convinced of a need for accountability to the people of the State of Michigan, this relationship is acknowledged. Faculty perhaps are too occupied with professional activities to be avidly interested in planning. As President Paul Reinert paraphrases, "When one is busy fighting off alligators, he is not inclined to worry about the philosophical aspects of an induced course load matrix."[42] Faculty understand Cheit's folk method administration, but the new system requires a depth of commitment and understanding altogether different in quality and magnitude than in past years.

Are goals and assumptions important to planning? Perhaps surprisingly,

the faculty seem to think so. One individual stressed "the need to use many varied segments of the academic community for identifying and formulating meaningful goals for purposes of long-range planning." The seminar eventually adopted this recommendation, and as a consequence, the university has contracted for assistance in this process through the Institution Functioning Inventory and Institutional Goals Inventory developed by ETS. The seminar also implied that to enable institutional goals to be more functional, goals should have consequences for decision-making. A cynical faculty member suggested that "planning units. . . will incorporate goal statements into their plans to the extent which the statements coincide with their own objectives." Most significantly, the faculty, perhaps spurred on by a plethora of college catalogs which aspire to develop the "whole person," emphasized the need for goals to possess a measurable quality. It was thought that the institutional mission and goals should lead to observable results.

Do faculty tend to worry about information systems? Yes, in the glare of seminar scrutiny, information systems in the form of enrollment predictions, student-faculty ratios and methods for calculating the above received an abundance of time and attention. One member remarked that "like other assumptions in planning, it [use of ratios] ought to undergo analytical scrutiny." Another worried, "as long as the outside parameters remain constant, it does not seem that rational or reasonable discussion can take place but rather. . . will continue to be very parochial in nature. . . until a review of the ongoing techniques and a study of their reliability or appropriateness, is made, most discussions of ratios will be self-serving at best." Actually, unit cost analysis received a surprising degree of support from the faculty providing that two conditions were met: 1) that the information be as

error free as possible, and 2) that communication about use of the information systems be optimized.

The dilemma of doing more with fewer resources was noted. Budgetary restraints are not incentives to save money. In addition, when decisions are made at more centralized administrative levels, there is a tendency to diminish the motivation which departments might feel for effective planning. A composite effect on all departments would tend to perpetuate the status quo of the university. As a countervailing force to this potential trend, the seminar emphasized a need for flexibility in planning, a need to experiment with different models, pilot programs, and varied systems of delegating responsibility. A product of thir thinking was an attempt to decentralize decision-making. Two schools out of the five are involved in an approach to planning whereby the respective schools are given total lump sum resources and asked to develop their own internal system of planning and allocation consistent with the external constraints. To date, the model has dealt primarily with faculty allocations although there are visions of more comprehensive resource amalgamation. It does not represent a return to Cheit's "folk methods" because data is still collected, and state and university constraints are extant, but the units may be creative in their internal planning to create incentives. In sum, the two schools have fairly stable enrollments although there are enrollment shifts from one department to another. All schools at Central Michigan University were offered an invitation to participate in this experiment, and it is interesting that three school deans turned down the opportunity to "go it alone." Although the results of the above experiment are preliminary and fragmentary, there does seem to be more acceptance by faculty of the outcomes of planning in the pilot project, although there

is no evidence that the outcomes of planning are, in fact, superior in quality. To promote incentives for constructive change and innovation, the Carnegie Commission recommends that planning units be given a large proportion of annual money savings for carry over purposes. In Michigan, this technique would be difficult because of potential budgetary deductions by the legislature. However, there could be some imaginative equivalent savings which might be provided to a department as a reward for frugal management.

Do faculty want to be informed about the allocations resulting from planning? Are they adequately informed about the process? The seminar was unanimous in desiring improved feedback from those levels where decisions are made. Increased communication at all levels was deemed essential to successful planning. As a specific outcome, an annual fall workshop was scheduled to describe the mechanics of planning to the faculty. In addition, the Provost went to each school in the early fall to explain and analyze the budgetary allocations which had resulted from the previous year's planning cycle. Deans and Department Chairpersons repeatedly made themselves available to their departments and faculty respectively for the purpose of explaining planning decisions. The seminar agreed to perpetuate itself in name, if not in membership, for the purpose of providing a faculty based ongoing review and refinement procedure.

Consequences of Planning at Central Michigan University

In light of the intensive systematic effort which Central Michigan University has applied to its planning and allocation systems in the period 1971-75, it is instructive to examine some consequences of academic planning.

Planning has worked. Aaron Wildavsky argues that "planning is defended not in terms of results but as a valuable process."[43] His implication is that planners are unable to show positive results. This is to ask the wrong question. The clock cannot be turned back. What results does one expect from not planning? What are the alternatives to planning? There are no rational answers. Therefore, one must go with impressions, with instincts. As Earl Cheit suggests, "the benefit ...lies in requiring them [administration and faculty] to look at the future in a more orderly way."[44] At Central, decisions are not made in isolation. The days of secret, sealed envelopes containing allocations are gone. The University is no longer surprised by the tenure of an unneeded specialist. When the State of Michigan has requested obtuse information on program costs, the data has been available. Faculty have developed an appreciation for the needs of departments remote from their own base. There are changes occurring in "attitudes, practices and policies." The university has responded to short term changes, since an enrollment driven model follows the dictates of "them that has, gets."

The long term benefits, however, are perhaps less certain. The academic community appears to be developing a shared sense of purpose and direction but is still quite removed from the day when the Department of Physics will even reluctantly accept the loss of a staff member because Psychology's planned needs are greater. Probably the greatest challenge facing Central's planning process in the future is the need to rationally direct students and resources into programs which are congruent with institutional long-range goals.

The direct costs of planning have been reasonable. Large expenditures attributable to planning have not been in staff, computers or software, but rather indirectly

in a more precious commodity: faculty time. This recognized problem has been combated since the inception of planning. Planning forms and documents have been simplified and summarized on the basis of experience. Planning units have been actively encouraged to reduce the rhetoric associated with reports. The review process has been simplified. However, as is true with any shared governance system, faculty participation in decision-making requires a certain residual amount of time beyond which it is difficult to effect cost savings

While Central Michigan University has been responsive to State wishes, it is not clear that the institution has received more funds because of planning. The evidence is minimal and ambiguous. Over the last five years, Central has enjoyed the largest percent increase in state appropriations when compared to look-alike institutions. However, the institution is still next to the bottom in appropriated dollars per fiscal year equated student. Would Central have done as well without planning? Based again on impressions, the answer must be no. While the University has not been explicitly rewarded for good planning and information, penalties have not been assessed for lack of preparation or lack of cooperation with the legislature, as has been the case with other institutions. State funding for higher education in Michigan is still primarily a political process rather than a formula budgeting approach.

By definition, Central's planning process has a basic characteristic of "a separation between planning activity and the review of plans."[45] "The process attempts to rationalize decision-making by minimizing the ad hoc nature of decisions. No important decision can be made in isolation from all other decisions because every allocation affects all other possible allocations."[46] Localization of authority would seem to be an inevitable consequence of the application of the above principle. To

deny the possibility of a shared sense of purpose and responsibility would appear to be an undesirable outcome, and consequently, several steps have been taken to counteract such an influence. In addition to giving schools autonomy in resource allocation, the deans have employed different models of planning committees either for review or for actual decision-making. The faculty seminar also recommended its own continuance as a form of faculty input into the entire process. Any consequences of centralization will have to be watched closely in years to come.

Potential loss of diversity has been a focus of attention since the beginning of planning. Assignment of student-faculty target ratios to departmental units started from the assumption that there should be a compression or leveling of ratios across the spectrum of different disciplines. Differences in discipline methodology should not warrant extreme variation of departmental ratios (8-1 to 33-1). The seminar urged a re-examination of target ratios and warned of the danger "that planning itself would tend to continue the status quo of the university" and noted that because of motivational problems, "change is difficult to accomplish." From the perception of non-departmental academic units, the planning process does not provide for a planning activity parallel to that of departmental units. Moreover, the process leads to review by groups on which the above units have no representation. It is important to note that all of the preceding influences on diversity might be easily ascribable to economic hard times and not just to planning. It is difficult to disentangle the influence of planning on the loss of diversity from other variables.

Has the process, as opposed to academic concerns, affected the way decisions are made? Basic instincts lead one to an uneasy conclusion that this is a problem of enormous magnitude which may not be easily resolved. The issue of generating

faculty incentive to do more with less has been previously described. When departments and faculty see a cause and effect relationship between planning and allocation and between unit costs and allocation, they attempt to alter the inputs so as to achieve increased resources. In an enrollment driven model, departments do what seems necessary to attract students. In its five-year plan, the Department of Economics baldly states, ". . . we have found our most pressing need is to attract a growing number of students into our classes."[47] The School of Arts and Sciences addresses the issue of what it calls "curricular imperialism," and suggests that while other Schools have become more restrictive and gained students, in a desire for enhanced flexibility, Arts and Sciences has lost students and consequently; faculty.[48] Whether the faculty have sacrificed their integrity as suggested by the above or whether they have quite humanly responded to retrenchment of colleagues is a moot point. The system does permit a kind of negative feedback which may alter or pervert the very reason for its existence. Heisenberg determined that certain properties of the electron could not be measured without being influenced by the measuring instrument which may be comparable to the dilemma which results from a reliance on indeterminate information systems as an allocation mechanism.

The National Center for Higher Education Management Systems (NCHEMS) at WICHE has developed a computer based model labeled Resource Requirement Prediction Model 1.6 (RRPM 1.6) for calculating the interrelated nature of various parameters affecting instruction. This model may be used to predict changes resulting from cost modification of different variables such as teaching load, class size, salaries, etc. The NCHEMS staff have developed a simulations game which helps train administrators to understand these interrelationships although there is a "cigarettes may

be hazardous to your health" warning attached to the front of the RRPM manual. Apparently because instructional input lends itself to quantification of a sort, the entire focus of RRPM is on the instructional portion of the budget. Almost ignored on one of the computation sheets of the simulation game is the following equation:

"$100,000 + ($100 x enrollment) + ($1,000 x FTE faculty)
+ ($50 x FTE instructional staff) + ($10 x SCH)
+ (.2 x direct instruction budget) = Total budget requirement for institutional costs other than instruction!"[49]

The raticnale for the specifics of the above equation are elusive but the overall intent is clear. How does one plan and allocate funds to non-instructional portions of the budget? At Central, a faculty attitude is that they are left with the last piece of pie after the rest has been eaten. Again quoting from the School of Arts and Sciences, "The major decisions have already been made before the first faculty committee meets; the legislature has already determined the university budget, and the administration has already apportioned the academic share and determined the faculty positions for the schools." And further that "Central administration has put a high priority on a number of such non-teaching areas as campus beautification, expansion of the intercollegiate athletic program, increase in the number of personnel in central administration, and extensive funding of public broadcasting. Our concern is that emphasis on these non-teaching areas may have caused the perceived underfunding of academic areas."[50]

Although the above concerns may be more imagined than real, they suggest the crucial nature of timing in planning: the synchronized meshing of plans from different areas of the university. Moreover, the implication of the above is that

an all university comprehensive planning process is desirable and not just one confined to instruction. An apparent incongruity to all of this is that faculty may ultimately seek protection in the cloak of quantification because other university activities are much more difficult to analyze and rationalize numerically.

Other difficulties with the planning process at Central Michigan have been noted. Planning, combined with hard times and human nature, lead organizational units to approve decisions in small increments. The bold, calculating move by an administrative officer or (less likely) academic entity seems to be mitigated by the existence of a planning bureaucracy. While seemingly a rein on centralization of power, any diffusion of authority also supports the status quo.

While NCHEMS and others warn of the need for understanding in exchanging institutional data, on a local level, some difficulties also appear due to varied definitions of information. Consider departmental student-faculty ratios. Does an equated faculty member include the administrator who teaches, graduate students who teach, faculty who use their time for institutional responsibilities, students who are paid as hourly employees to help instructors, students who receive a grade in one course for the purpose of teaching students in another course? Does the ratio reflect laboratory course instruction, activity course instruction, the number of stations in a room, the instructional methodology and technology, and those situations where a faculty member offers different courses at the same time? How about team taught courses, co-listed courses? What is the cost of programming to cover all of the above? Does it represent a point of diminishing returns?

It is apparent that even on an intrainstitutional basis, comparisons of unit cost are highly suspect and place unusual burdens upon those who use and interpret

such data. Faculty are naive about such matters. It is significant that at the 1974-75 fall workshop and after five years of planning, the first faculty question was, "What is an FTE?"

Collective Bargaining and Planning at Central Michigan

Faculty collective bargaining came to Central's campus during the 1969-70 academic year, and the faculty under the aegis of the National Education Association are presently in the midst of their third contract. As previously noted, the campus is in its fifth year of academic planning, and although the analog is far from perfect, the origins of both processes at CMU are deeply rooted in influences which are shaping all of higher education. The economic climate, demand for accountability, and technological advances all have stimulated increased planning and also have contributed to the protective posture of faculty organization. A characteristic of the collective bargaining environment at Central has been an attempt to maintain the traditional academic governance processes while the scope of bargaining has been restricted to a narrow interpretation of "conditions of employment." The future of these parallel governance patterns are in doubt as a consequence of a recent Michigan Employment Relations Commission recommendation to require that the issue of evaluation of faculty as teachers be bargained at the table. As part of the above parallel, faculty have participated extensively in the planning process. Faculty have also had some involvement in the decision-making which grows out of planning. If the institution moves into more comprehensive bargaining, the scope of faculty activity in planning may be profoundly different and may even be bargained.

Many of the characteristics of planning and of bargaining are mutually reinforcing if not directly interacting. Both systems rely upon extensive information systems as a basis for defining the past and projecting into the future. Simulation models are embedded in each process. Induced course load matrices and institutional versions of costing models suggest outcomes which then may be utilized by the respective processes. Bargaining and planning imply a complete sharing of information. As Neil Bucklew notes, "Until the employee organizations recognize the general fiscal structure and situation of the organization, there is little potential for a continuing attitude of fiscal responsibility on their part."[51]

The faculty bargaining unit at CMU has constantly urged the use of relatively mechanistic and impersonal information systems for decision-making. An early issue of the union newsletter detailed a unit cost analysis of the supplies budgets of the various academic departments and implied that the budgets should parallel the number of students instructed and/or the number of publications of the respective faculties. A recent faculty-administration salary equity committee arrived at a purely statistical means of redressing past salary imbalances. To date all contracts bargained have excluded "merit pay" increments and have relied upon formulary approaches to salary increases. At Central, collective bargaining has meant an emphasis on non-qualitative judgments affecting salary as well as an apparent willingness to examine various uses of management information systems. Although one would expect administrators to readily embrace such systems for planning purposes and resource allocation, faculty may also adopt such mechanisms in collective bargaining. Resource decisions are difficult for faculty to make. As Peggy Heim observes, "faculty members...may find management information and

mechanistic planning systems a means of reducing strain, maintaining their view of self and preserving the social fabric."[52]

Critics of planning often point to its emphasis on measures of productivity. Stephen Bailey suggests that unionism may strengthen the grip of efficiency cultists on education.[53] Prior to the unionization election at Central Michigan University the President and the Chairman of the Board of Trustees stated in the strongest possible terms that the process of bargaining was perhaps more appropriate to industry. To a limited degree, planning and bargaining both reflect an industrial model of operation. In stark contrast with industry, however, the university cannot easily increase its productivity or its receipts. How bargaining and planning recognize this basic reality will determine their future viabilities in higher education.

Both processes are costly. While it may be argued that manpower, computer hardware, and development of information systems may be essential for external reasons, the planning and bargaining processes require unusual investments of faculty and staff time. As the obligation of human energy to these non-academic pursuits increases, the task of educating students may seem less important. Neil Bucklew has detailed the significant direct and indirect costs of collective bargaining and describes the "paperage" inherent in the process as "legendary."[54] Planning systems which involve faculty extensively as does the process at Central Michigan, most certainly share the problem of cost.

In addition, bargaining may be in tension with planning. A member of an American Federation of Teachers faculty unit argues that the introduction of management systems to a campus requires faculty adoption of collective bargaining.[55]

Charles Ping focuses on the fundamental dilemma of a faculty agent having a narrow self-interest which may not be congruent with the interest of the university as a whole. He states,

> "The long-range result of collective bargaining on the university may well be a limit on the ability of individual institutions to use imagination and intelligence to plan" and "Among the chief dangers of faculty bargaining is creation of an embattled and adversary spirit that is a deterrent to program planning."[56]

Based on Central's experience, a sense of common interest has by and large prevailed over any adversarial quality in both planning and bargaining. The spectre of state control lurking in the background will tend to support a continuance of this community interest. However, the increasing financial ravages of inflation may combine with desired power and protection to limit institutional abilities to plan.

Academic Planning - Its Future

What is the future of academic planning and management in higher education? Incontrovertible evidence supports a continued longevity of the managerial movement. Even should a miraculous economic cure for the ills of education appear, it is at least arguable whether or not the growing need for accountability would dissipate. If a systematic approach to management of higher education is inevitable, how may some of the deleterious impacts be buffered or moderated while preserving the distinctive qualities of the academy? Peter Drucker is quoted as saying,

> "How to manage service institutions for performance. . . this may well be the biggest amd most important management task for the remainder of this century."[57]

Although the service institution description is not one which is warmly embraced, the university has a special obligation to support consumerism in education. Anything

less would be hypocrisy. We "must occasionally make legitimate demands upon the treasuries of the purse in order to nourish the treasuries of mind and soul,"[58] and through all not flinch from accountability. How may the destiny of higher education be shaped? A number of mechanisms suggest themselves.

1. The public must be convinced of the positive outcomes of higher education.

As Ben Lawrence has noted, "We must find ways to explain to the public the benefits of higher education in terms they can understand."[59] The consumer must want to financially support "the treasuries of mind and soul." The baccalaureate is an ennobling experience, leading to fruitful lives and careers. Is the public convinced of this? Perhaps those in the academy should talk less with one another and more with the person on the street. The most important role for leadership may be one of defining the desired outcomes of higher education and quantitatively measuring these outcomes. If industrial models are inappropriate for education, what does higher education have to offer as a realistic alternative?

2. Growth in education must be contained and influenced.

Is the steady state merely awaited by colleges and universities, or can the orientation of growth be channeled in appropriate directions while protecting diversity? Self discipline is the protection of diversity. Enrollment caps should be planned by universities and not avoided. A "damping effect" on the cycles of boom and bust would seem more rational if it were desired and controlled. Through self initiative, university officials must stabilize the institutional whole while seeking internal flux and growth through replacement. Institutions must superimpose their own form of steady state. The heritage of growth in higher education is difficult to forget.

3. Information must be precise, available, and understood.

The degree to which information is required at a particular institution will depend on external as well as internal constraints. All information should be accurate, available to the community, and understood by those who use it. Although the following guidelines were meant for interinstitutional data exchange, they seem appropriate to internal use as well. "Particulars must be provided to:

> Fully agree to the purpose of any comparisons and the use to which the data will be put;
> Insure that the data to be collected are consistent with the expressed purpose; [and consistent with institutional goals]
> Define all terms explicitly and include detailed definitions with any data disseminated;
> Provide profiles of each program to be compared, including information on all aspects of the program which may affect the data; and
> Permit the providers of the data to review the results so that errors of fact or interpretation may be avoided."[60]

Almost all data used in information systems have errors of uncertainty of measurement. It is essential that the propagation of these errors be understood in data utilization.

In general, the availability of management information will tend to reinforce the quality and type of governance systems which already exist. As Ben Lawrence points out, "information is most hazardous to the authoritarian regime."[61] A primary administrative concern should be to minimize any lack of shared perception in institutional difficulties. A time lag in perception of economic stress by faculty was seen in the "old" depression.[62]

4. The separation between information systems and decision-making must be explicitly clear.

Information should not be allowed to make decisions or be construed to over-simplify problems. Real understanding of information carries an implied assumption

of its limitations. Decisions represent value judgments. The best, most compelling decisions are often those which, although based on quantitative information, may be articulated in qualitative terms. It is the responsibility of academic leadership to buffer the shock of misleading information and to resist the temptation to let data make decisions.

5. Management systems should be internally devised although interinstitutional cooperation is essential.

For those who are not confined within a state system, a voluntary association and cooperation with other institutions is essential. The lip service and program duplication of the past deserves public outcry. However, those institutes, associations, commissions and other groups which are publishing management and planning software are perhaps doing higher education a disservice. Rather than adapting universities to a process which they don't understand, and which may not accurately represent the particular institutional flavor, management systems would seem to be more precise and useful if they were internally generated and if the pride of authorship were apparent. Loose consortiums of similar insitutions might be most effective in information and program exchange.

6. Flexibility in planning should be emphasized.

As Earl Cheit notes, "I have never met a faculty member who needs to be managed."[63] A managerial process must retain faculty support and an ability to respond to change. A process should accommodate inspiration and not deaden aspiration. Bright, attractive program ideas need to be nourished. The Carnegie Commission in its More Effective Use of Resources suggests ways to generate dollars for that which is "new" by taking away resources from the "old." Rigidity implies

stagnation and also a future which is too predictable. An opportunity should exist for decisions which are not incremental in character. As Ken Boulding comments, "The greater the uncertainty, the more flexibility there should be."[64] There needs to be a blend between those realistic qualities of a stationary state and an emphasis on incentives for constructive change and innovation. As previously described, the desirability of stability is directly related to magnitude of scale.

Conclusion

Planning and management is now and will continue to be a way of life for the academy. The shape of education in the years to come will be determined by the ability to accommodate management systems and mold them to a desired form. Walter Metzger notes that faculty are finding it increasingly difficult to convince themselves that they are distinctive, and they are less certain what makes them different.[65] As the academic profession embraces planning systems and learns to live with a dismal financial future, leadership skill in defining this difference will be crucial. Academic planning seems to have had some beneficial impact; more institutions are being described as "managed" in the sense of adopting an overall strategy to confront the new depression. Accordingly, to have developed a capacity to operate at reduced rates of growth with a maintenance of quality, appears to be the most demonstrable benefit of planning. The strength and survival of higher education is inextricably tied to an ability to anticipate.

> "To fail to anticipate and to plan is to face the future with inadequate preparation, no explanation of alternatives; it is to let the institution be shaped by default rather than the deliberate consent of reason."[66]

Academic planning is the tool, the skill, the "deliberative consent of reason" so vital

to the life processes of an academic institution. Despite present problems, the possibilities of effective, thoughtful planning procedures provide the most rational direction for the future of higher education.

FOOTNOTES

[1] Earl F. Cheit, The New Depression in Higher Education, p. 5

[2] Clark Kerr, in Ibid., p. xii

[3] "Saving For College," The Chronicle of Higher Education, March 24, 1975, p. 3

[4] Kingman Brewster, in The New Depression in Higher Education, p. 1

[5] Robben W. Fleming, "Reflections on Higher Education," Daedalus, Winter, 1975, p. 15

[6] Cheit, op. cit., p. ix

[7] Earl F. Cheit, The New Depression in Higher Education - Two Years Later, p. 59

[8] Lyman A. Glenny, "The Illusions of Steady State," Change, December-January, 1974-75, p. 24

[9] Priorities for Action: Final Report of the Carnegie Commission on Higher Education, p. 9

[10] Kenneth E. Boulding, "The Shadow of the Stationary State," Daedalus, Fall, 1973 p. 89

[11] Boulding, Ibid., p. 89

[12] Juanita M. Kreps, "Higher Education in a Low-Growth, High Inflation Economy," p. 10

[13] Walter P. Metzger, "The American Academic Profession in Hard Times," Daedalus, Winter, 1975, p. 29

[14] Howard Bowen, in The New Depression in Higher Education, p. viii

[15] Carnegie Commission on Higher Education, The More Effective Use of Resources, p. 49

[16] Cheit, The New Depression in Higher Education, p. 83

[17] Earl F. Cheit, "The Management Systems Challenge: How to be Academic Though Systematic," p. 1

[18] John R. Silber, "Poisoning the Wells of Academe," International Council on the Future of the University Newsletter, January, 1975, p. 2

[19] Lawrence Bogard, "Management in Institutions of Higher Education," in Papers on Efficiency in the Management of Higher Education, 1972, p. 1

[20] Cheit, The New Depression in Higher Education - Two Years Later, p. 65

[21] "System Center's Products and Their Use by Colleges," The Chronicle of Higher Education, April 1, 1974, p. 12

[22] "Priority Listing of Needs From the Commissioners' Survey, "Issues and Needs of Post Secondary Education in the West, May, 1974

[23] The National Commission on the Financing of Post Secondary Education, Financing Post Secondary Education in the United States, p. 329

[24] W. Lewis Hyde, "Proved at Last: One Physics Major Equals 1.34 Chemistry Major of 1.66 Economics Major," Educational Record, Fall, 1974, p. 289

[25] A College Planning Cycle: People, Resources, Process - A Practical Guide, National Association of College and University Business Officers, p. 5

[26] Cheit, "The Management Systems Challenge: How To Be Academic Though Systematic," p. 7

[27] Stephen K. Bailey, "Combating the Efficiency Cultists," Change, June, 1973, p. 8

[28] Charles J. Hitch, "Ten Years After, Ten Hears Hence," Daedalus, Winter, 1975, p. 56

[29] Harold L. Enarson, "University or Knowledge Factory," The Chronicle of Higher Education, June 18, 1973, p. 16

[30] Carnegie Commission on Higher Education, The More Effective Use of Resources, p. 5

[31] Robert Wood, Daedalus, Winter, 1975, p. 45

[32] Cheit, "The Management Systems Challenge: How to be Academic Though Systematic," p. 14

[33] Aaron Wildavsky, "Does Planning Work?" The Public Interest, Summer, 1971, p. 96

[34] Edward Jennings, "The Pitfalls of Planning," mimeographed paper, 1974

[35] Francis Finn, Symposium on Program Budget Evaluation Systems and Higher Education, 1973, p. 61

[36] Enarson, op. cit., p. 16

[37] Charles J. Ping, "The Planning and Allocation System: A Description of the Planning Process at Central Michigan University," mimeographed paper, 1974

[38] Ibid., p. 9

[39] Ibid., p. 12

[40] Planning for the Future, Central Michigan University, p. 7

[41] A Planning Seminar Report was maintained as a form of summary of the meetings

[42] Paul C. Reinert, Commentary on Earl F. Cheit's paper, "The Management Systems Challenge, How to be Academic Though Systematic," 1973

[43] Wildavsky, op. cit., p. 96

[44] Cheit, "The Management Systems Challenge: How to be Academic Though Systematic," p. 17

[45] Planning for the Future, p. 3

[46] Ping, op. cit., p. 1

[47] Five-Year Plan, Department of Economics, 1974-75, p. 2

[48] Five-Year Plan, School of Arts and Sciences, 1974-75, p. 11

[49] Resource Requirements Prediction Model 1.6, National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, 1973, foldout page

[50] Five-Year Plan, School of Arts and Sciences, 1974-75, p. 5

[51] Neil S. Bucklew, "Collective Bargaining in Higher Education: Its Fiscal Implications," Liberal Education, May, 1971, p. 259

[52] Peggy Heim, "The Use and Misuse of Management Information: Advantages and Disadvantages from the Perspective of the Institution," Information Impact - Collision with Tradition, May, 1974, p. 26

[53] Bailey, op. cit., p. 8

[54] Bucklew, op. cit., p. 256

[55] Marcoantonia Lacatena, "The Dangers of a Management System: The New Jersey Case Study," mimeographed paper

[56] Charles J. Ping, "Unionization and Institutional Planning," Educational Record, Spring, 1973, p. 105

[57] Peter Drucker, as quoted in Jack Magarrel, "The New Managers on Campus," The Chronicle of Higher Education, April 1, 1974, p. 10

[58] Bailey, op. cit., p. 8

[59] Ben Lawrence, "Report and Comments on the National Commission on the Financing of Post Secondary Education," Information Impact - Collision with Tradition, May, 1974, p. 148

[60] Adrian H. Harris, The Comparability Question: Potential Uses and Misuses of Data", Proceedings of the Association for Institutional Research, May, 1973, p. 6

[61] Lawrence, op. cit., p. 145

[62] Cheit, The New Depression in Higher Education - Two Years Later, p. 61

[63] Cheit, "The Management Systems Challenge: How to be Academic Though Systematic," op. cit., p. 30

[64] Kenneth E. Boulding, "Reflections on Planning: The Value of Uncertainty," Technology Review, October-November, 1974, p. 8

[65] Metzger, op. cit., p. 31

[66] Ping, "The Planning and Allocation System: A Description of the Planning Process at Central Michigan University," p. 4

BIBLIOGRAPHY

Bailey, Stephen K., "Combating the Efficiency Cultists," Change, Vol. 5 No. 5 (June, 1973), p. 8.

Bogard, Lawrence, "Management in Institutions of Higher Education," Papers on Efficiency in the Management of Higher Education, A technical report sponsored by the Carnegie Commission on Higher Education, 1972, p. 1.

Boulding, Kenneth E., "The Shadow of the Stationary State," Daedalus, Vol. 102, No. 4 (Fall, 1973), p. 89.

Boulding, Kenneth E., "Reflections on Planning: The Value of Uncertainty," Technology Review, Vol. 77, No. 1 (October-November, 1974), p. 8.

Bucklew, Neil S., "Collective Bargaining in Higher Education: Its Fiscal Implications," Liberal Education, Vol. 57, No. 2 (May, 1971), p. 255.

Carnegie Commission on Higher Education, Priorities for Action: Final Report of the Carnegie Commission on Higher Education, New York: McGraw-Hill Book Company, 1973.

Carnegie Commission on Higher Education, The More Effective Use of Resources New York, McGraw-Hill Book Company, 1972.

Cheit, Earl F., The New Depression in Higher Education, New York, McGraw-Hill Book Company, 1971.

Cheit, Earl F., The New Depression in Higher Education - Two Years Later, A technical report sponsored by the Carnegie Commission on Higher Education, 1973.

Cheit, Earl F., "The Management Systems Challenge: How to be Academic Though Systematic," paper presented at the 56th Annual Meeting of the American Council on Education, October 11, 1973 (page references refer to mimeographed copy of his talk).

Enarson, Harold L., "University or Knowledge Factory," The Chronicle of Higher Education, Vol. 7, No. 36 (June 18, 1973), p. 16.

Finn, Francis, remarks made at the Symposium on Program Budget Evaluation Systems and Higher Education, sponsored by the Association of Michigan Collegiate Faculties and Michigan Conference of American Association of University Professors, March 31, 1973 (page references refer to the printed copy of the Symposium).

Fleming, Robben W., "Reflections on Higher Education," Daedalus, Vol. 104, No. 1 (Winter, 1975), p. 15.

Glenny, Lyman A., "The Illusions of Steady State," Change, Vol. 6, No. 10 (December-January, 1974-75), p. 24.

Harris, Adrian H., "The Comparability Question: Potential Uses and Misuses of Data," mimeographed paper presented to the Association for Institutional Research, May, 1973.

Heim, Peggy, "The Use and Misuse of Management Information: Advantages and Disadvantages From the Perspective of the Institution," Information Impact - Collision With Tradition, proceedings of the 2nd National Forum on New Planning and Management Practices in Post Secondary Education (Chicago, November 14-16, 1973), Report No. 49 of the Education Commission of the States, 1974, p. 18.

Hitch, Charles J., "Ten Years After, Ten Years Hence," Daedalus, Vol. 104, No. 1 (Winter, 1975), p. 156.

Hutchins, Robert M., "Hard Times and the Higher Learning," Yale Review, Vol. 22, No. 4 (June, 1933), p. 714.

Hyde, W. Lewis, "Proved at Last: One Physics Major Equals 1.34 Chemistry Major or 1.66 Economics Major," Educational Record, Vol. 55, No. 4 (Fall, 1974), p. 289.

Jennings, Edward, "The Pitfalls of Planning," mimeographed paper, 1974.

Kreps, Juanita M., "Higher Education in a Low-Growth, High Inflation Economy," paper presented to the 57th Annual Meeting of the American Council on Education, October 10, 1973 (page references refer to mimeographed copy of her talk).

Lacatena, Marcoantonia, "The Dangers of a Management System: The New Jersey Case Study," mimeographed paper.

Lawrence, Ben, "Report and Comments on the National Commission on the Financing of Higher Education," Information Impact - Collision with Tradition, Proceedings of the 2nd National Forum on New Planning and Management Practices in Post Secondary Education (Chicago, November 14-16, 1973), Report No. 49 of the Education Commission of the States, 1974, p. 148.

Magarrel, Jack, "The New Managers on Campus," The Chronicle of Higher Education, Vol. 8, No. 26 (April 1, 1974), p. 9.

Metzger, Walter P., "The American Academic Profession in Hard Times," Daedalus, Vol. 104, No. 1 (Winter, 1975), p. 29.

Ping, Charles J., "The Planning and Allocation System: A Description of the Planning Process at Central Michigan University," mimeographed paper, 1974.

Ping, Charles J., "Unionization and Institutional Planning," Educational Record Vol. 54, No. 2 (Spring, 1973), p. 100.

Reinert, Paul C., "The Management Systems Challenge: How to be Academic Though Systematic," mimeographed commentary on Earl F. Cheit's paper at the 56th Annual Meeting of the American Council on Education, October 11, 1973.

Silber, John R., "Poisoning the Wells of Academe," International Council on the Future of the University Newsletter, Vol. 2, No. 1 (January, 1975), p. 2.

Wildavsky, Aaron, "Does Planning Work?" The Public Interest, No. 24. (Summer, 1971), p. 95.

Wood, Robert, "Academe Sings the Blues," Daedalus, Vol. 104, No. 1 (Winter, 1975), p. 45.

_____, A College Planning Cycle: People, Resources, Process - A Practical Guide, National Association of College and University Business Officers, 1975.

_____, Five-Year Plan, Department of Economics, Central Michigan University, 1974-75.

_____, Five-Year Plan, School of Arts and Sciences, Central Michigan University, 1974-75.

_____, Planning for the Future, Central Michigan University, Vol. 1, No. 4, 1974.

_____, "Priority Listing of Needs from the Commissioners' Survey," Issues and Needs of Post Secondary Education in the West: A Legislative/WICHE Inquiry, Western Interstate Commission For Higher Education, May, 1974.

_____, Resource Requirements Prediction Model 1.6, National Center for Higher Education Management Systems at Western Interstate Commission for Higher Education, 1973, foldout page.

_____, "System Center's Products and Their Use by Colleges," The Chronicle of Higher Education, Vol. 8, No. 26, (April 1, 1974), p. 12.

_____, "Saving For College," The Chronicle of Higher Education, Vol. 10, No. 5 (March 24, 1975), p. 3.

_____, The National Commission on the Financing of Post Secondary Education in the United States, The National Commission on the Financing of Post Secondary Education, Washington, Government Printing Office, 1973.